



DEPARTMENT OF CONSERVATION
STATE OF CALIFORNIA

December 5, 2003

NOTICE

To: All Interested Parties

Subject: Biannual Report of Beverage Container Sales, Returns, Redemption, and Recycling Rates for January-June 2003

Under Public Resources Code Section 4551, the Department of Conservation (Department) is required to report the redemption and recycling rates for each six-month period within 130 days of the close of that period. Enclosed please find the Biannual Report of Redemption and Recycling Rates for the first half of the 2003 calendar year. In addition, we have enclosed historical information on annual redemption and recycling rates from 2001 through the close of 2002.

The overall beverage container recycling rate is 58 percent. The recycling rates by material type are: aluminum, 73 percent; glass, 54 percent; #1 PET plastic, 38 percent; #2 HDPE plastic, 32 percent; and bimetal, 10 percent. The recycling rates for other plastics are: #3 PVC, 6 percent; #4 LDPE, .05 percent; #5 PP, 0 percent; #6 PS, .01 percent, and #7 Other, 1.71 percent.

If you have any questions about this report, please contact me or Jim Ferguson, Assistant Director for Recycling, at (916) 323-3836.

Darryl Young
Director

Enclosures

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Table 1
December 5, 2003

Biannual Report of Beverage Container Sales, Returns, Redemption & Recycling Rates

RATES			CONTAINERS			
ALUMINUM	Redemption	Recycling	Sales*	Recycled	Refillable	Postfilled
JAN - JUNE 2003	73	73	4,405,134,930	3,217,185,286	0	30,323,558
JULY - DEC 2002	70	70	5,117,738,002	3,592,569,402	0	49,310,002
JAN - JUNE 2002	79	79	4,303,156,814	3,378,585,046	0	36,679,346
JULY - DEC 2001	70	70	5,229,928,476	3,674,003,411	0	43,996,536
JAN - JUNE 2001	80	80	4,196,752,969	3,362,768,981	0	31,407,467
GLASS						
JAN - JUNE 2003	62	54	1,544,651,112	840,761,450	295,645	154,423,549
JULY - DEC 2002	53	47	1,879,713,609	882,526,227	233,617	151,473,485
JAN - JUNE 2002	66	59	1,547,044,854	906,330,107	146,840	162,534,721
JULY - DEC 2001	57	50	1,916,863,937	949,198,970	243,260	184,157,045
JAN - JUNE 2001	68	59	1,552,645,762	919,355,723	135,192	178,210,962
#1 PET						
JAN - JUNE 2003	39	38	2,326,196,324	894,825,771	0	59,267,981
JULY - DEC 2002	32	32	2,750,648,550	882,355,419	0	52,822,430
JAN - JUNE 2002	41	41	1,982,107,978	805,230,416	0	53,267,278
JULY - DEC 2001	33	32	2,363,231,556	764,118,077	0	59,509,567
JAN - JUNE 2001	41	40	1,669,529,586	671,482,950	0	53,021,598
#2 HDPE						
JAN - JUNE 2003	93	32	273,260,492	86,624,603	0	171,773,542
JULY - DEC 2002	111	41	220,046,220	89,740,194	0	158,756,725
JAN - JUNE 2002	126	44	207,025,906	91,726,397	0	172,752,313
JULY - DEC 2001	106	38	240,794,928	91,189,617	0	167,668,660
JAN - JUNE 2001	116	40	216,780,334	85,951,431	0	168,896,575
#3 PVC						
JAN - JUNE 2003	6	6	480,282	26,518	0	2,423
JULY - DEC 2002	1	0	1,822,200	6,304	0	4,702
JAN - JUNE 2002	1	1	1,696,523	13,616	0	940
JULY - DEC 2001	2	2	1,525,079	27,827	0	3,116
JAN - JUNE 2001	1	1	1,994,685	23,663	0	1,056
#4 LDPE						
JAN - JUNE 2003	.11	.05	3,052,428	1,579	0	1,758
JULY - DEC 2002	.26	.04	4,766,384	1,845	0	10,402
JAN - JUNE 2002	0	0	8,912,638	572	0	21
JULY - DEC 2001	1	.08	10,445,403	8,742	0	101,014
JAN - JUNE 2001	.19	.03	3,620,764	896	0	5,850

(Continued on next page)



Biannual Report of Beverage Container Sales, Returns, Redemption & Recycling Rates

Table 1
December 5, 2003

RATES CONTAINERS

#5 PP	Redemption	Recycling	Sales*	Recycled	Refillable	Postfilled
JAN - JUNE 2003	0	0	604,273	996	0	500
JULY - DEC 2002	1	1	778,424	5,428	0	4,982
JAN - JUNE 2002	3	3	329,181	11,109	0	76
JULY - DEC 2001	3	1	311,584	4,339	0	5,078
JAN - JUNE 2001	15	15	202,710	30,383	0	1,016

#6 PS

JAN - JUNE 2003	.01	.01	35,214,171	3,678	0	1,459
JULY - DEC 2002	.08	.06	39,158,064	23,432	0	9,116
JAN - JUNE 2002	.01	.01	34,232,364	3,267	0	28
JULY - DEC 2001	.04	.01	33,475,821	1,920	0	12,955
JAN - JUNE 2001	.23	.23	16,381,131	37,839	0	900

#7 OTHER

JAN - JUNE 2003	1.74	1.71	10,166,265	173,945	0	7,750
JULY - DEC 2002	.28	.23	11,779,596	26,698	0	7,793
JAN - JUNE 2002	.19	.17	8,764,828	14,536	0	2,738
JULY - DEC 2001	.14	.12	7,464,111	8,660	0	2,366
JAN - JUNE 2001	.55	.33	3,378,467	11,160	0	7,74

BIMETAL

JAN - JUNE 2003	10	10	29,496,963	3,086,967	0	331,318
JULY - DEC 2002	2	2	29,884,139	502,061	0	131,736
JAN - JUNE 2002	1	1	26,512,803	282,983	0	24,266
JULY - DEC 2001	1	1	25,472,416	269,414	0	79,338
JAN - JUNE 2001	1	1	22,374,473	253,706	0	85,656

ALL MATERIALS

JAN - JUNE 2003	60	58	8,628,257,240	5,042,690,794	295,645	416,133,837
JULY - DEC 2002	56	54	10,056,335,188	5,447,757,009	233,617	412,531,372
JAN - JUNE 2002	66	64	8,119,783,889	5,182,198,050	146,840	425,261,726
JULY - DEC 2001	58	56	9,829,513,311	5,478,830,976	243,260	455,535,674
JAN - JUNE 2001	68	66	7,683,660,881	5,039,916,731	135,192	431,638,827

CALCULATION OF REDEMPTION AND RECYCLING RATES

A = number of empty beverage containers returned

Redemption Rate = $\frac{A + B + [C - (0.05 \times (A + B))]}{D}$

B = refillables returned

C = postfilled food or drink packaging containers returned

Recycling Rate = $\frac{(A+B)}{D}$ (The value in brackets [] is included only when greater than zero.)

D = number of beverage containers sold

CONTAINER PER POUND RATES (CRV/POSTFILLED)	ALUMINUM	GLASS	#1 PET	#2 HDPE	#3 PVC	#4 LDPE
JAN - JUNE 2003	29.3/34.18	1.87/1.01	11.2/5.52	4.6/5.02	9.3/NA	38.9/NA
CONTAINER PER POUND RATES (CRV/POSTFILLED)	#5 PP	#6 PS	#7 OTHER	BIMETAL		
JAN - JUNE 2003	12.5/NA	69.8/NA	9.1/NA	7.6/NA		

FOOTNOTE: * Because of the delay between the time a container is distributed for sale and the time it is returned for recycling, the Department has determined the average "return time" as two months. The sales shown reflect this lag.

CALENDAR YEAR - REDEMPTION AND RECYCLING RATES

Table 2
December 5, 2003



Rates			Containers				1 of 3
ALUMINUM	Redemption	Recycling	Sold	Recycled	Refillable	Postfilled	
2002	74	74	9,420,894,816	6,971,154,448	0	85,989,348	
2001	75	75	9,426,681,445	7,036,772,391	0	75,404,003	
2000	76**	76**	9,521,709,518	7,086,969,721	0	73,859,460	
1999	80	80	9,189,990,393	7,348,438,576	0	155,372,430	
1998	80	80	9,273,717,898	7,381,508,007	0	178,559,988	
1997	80	80	9,192,062,677	7,391,944,684	0	206,552,057	
1996	80	80	9,046,339,201	7,257,109,422	0	157,451,082	
1995	84	84	8,996,915,732	7,565,437,626	0	293,381,456	
1994	82	82	9,640,060,625	7,859,363,654	0	150,118,131	
1993	84	84	9,473,124,532	7,926,540,025	0	214,496,528	
1992	85	85	9,849,092,574	8,378,479,015	0	204,306,718	
1991	85	85	9,735,460,863	8,235,715,915	0	170,214,314	
1990	76	76	9,859,752,871	7,478,135,392	0	153,794,134	
1989	64	64	9,231,958,871	5,940,283,700	0	49,407,050	
1988	62	61	8,829,125,615	5,416,522,775	0	358,327,175	
GLASS							
2002	59	52	3,426,758,463	1,788,856,334	380,457	314,008,206	
2001	62	54	3,469,509,699	1,868,554,693	378,452	362,368,007	
2000	60**	54**	3,342,291,557	1,828,493,003	4,193,806	315,211,767	
1999	71	60	2,699,056,360	1,563,428,698	56,547,053	381,756,617	
1998	75	63	2,547,082,395	1,533,478,471	78,152,008	379,486,791	
1997	79	67	2,488,007,100	1,575,406,811	90,836,718	383,973,447	
1996	82	69	2,432,063,268	1,574,020,543	102,421,509	400,541,247	
1995	86	74	2,477,905,727	1,731,621,270	111,828,496	376,815,597	
1994	84	73	2,554,889,789	1,735,423,078	125,310,440	384,421,672	
1993	86	75	2,524,975,195	1,753,023,220	147,140,942	369,469,526	
1992	95	72	2,638,669,944	1,718,900,206	168,996,240	718,914,546	
1991	85	71	2,837,961,367	1,802,801,890	198,954,148	508,723,118	
1990	60	57	3,252,914,365	1,644,555,614	215,792,631	183,272,912	
1989	45	40	3,136,247,664	945,069,624	304,045,641	216,179,258	
1988	44	35	3,165,716,125	664,948,766	441,803,396	324,349,294	
#1 PET							
2002	36	36	4,732,756,528	1,687,585,835	0	106,089,707	
2001	37	36	4,032,761,142	1,435,601,027	0	112,531,165	
2000	34**	34**	3,239,139,000	1,181,701,068	0	73,332,339	
1999	79	65	1,278,411,247	829,974,260	0	223,909,692	
1998	69	57	1,284,678,834	731,421,805	0	193,778,325	
1997	69	58	1,206,774,464	698,322,157	0	168,565,032	
1996	69	59	1,028,068,545	607,521,858	0	127,904,829	
1995	74	64	760,783,391	488,882,966	0	99,011,197	
1994	80	71	605,667,834	429,468,272	0	77,573,604	
1993	76	70	577,329,580	403,344,084	0	58,323,616	
1992	75	68	549,907,144	371,540,845	0	58,814,794	

	Redemption	Recycling	Sold	Recycled	Refillable	Postfilled
#1 PET (Continued)						
1991	58	56	530,597,819	299,758,173	0	20,829,383
1990	31	31	558,856,452	171,828,692	0	8,298,647
1989	7	7	556,680,692	37,863,612	0	1,221,987
1988	5	4	560,093,605	24,327,749	0	2,971,618
#2 HDPE						
2002	118	42	427,072,126	181,466,591	0	331,509,039
2001	110	39	457,575,262	177,141,048	0	336,565,235
2000	98**	22**	385,191,241	93,243,804	0	345,788,475
#3 PVC						
2002	1	1	3,518,723	19,920	0	5,642
2001	2	1	3,519,764	51,490	0	4,172
2000	2**	2**	2,259,829	46,244	0	9,514
#4 LDPE						
2002	.09	.02	13,679,022	2,417	0	10,423
2001	.82	.07	14,066,167	9,638	0	106,864
2000	.03**	.03**	893,623	228	0	47
#5 PP						
2002	2	1	1,107,605	16,537	0	5,057
2001	8	7	514,294	34,721	0	6,094
2000	10**	10**	811,660	79,025	0	2,529
#6 PS						
2002	.05	.04	73,390,428	26,699	0	9,144
2001	.10	.08	49,856,952	39,758	0	13,855
2000	.25**	.25**	26,362,287	66,534	0	3,281
#7 OTHER						
2002	.24	.20	20,544,424	41,234	0	10,531
2001	.27	.18	10,842,578	19,820	0	10,112
2000	.67**	.54**	14,656,909	80,409	0	23,362
BIMETAL						
2002	2	1	56,396,942	785,045	0	156,002
2001	1	1	47,846,889	523,120	0	164,993
2000	1**	1**	25,093,499	297,767	0	63,323
1999	11	11	2,270,648	260,797	0	15,370
1998	13	13	2,088,892	264,603	0	10,246
1997	19	19	2,252,193	432,794	0	27,375
1996	17	17	2,230,519	388,095	0	29,890
1995	21	21	2,268,190	484,539	0	21,375
1994	17	17	2,506,373	430,610	0	10,470
1993	19	19	3,655,432	683,945	0	16,945
1992	12	12	6,453,684	796,519	0	42,330
1991	14	14	6,353,803	878,207	0	59,958
1990	3	3	10,529,837	314,760	0	34,415
1989	2	2	10,643,975	199,890	0	354,570
1988	.17	.17	7,683,421	13,237	0	300

	Redemption	Recycling	Sold	Recycled	Refillable	Postfilled
ALL MATERIALS						
2002	60	58	18,176,119,077	10,629,955,059	380,457	837,793,099
2001	62	60	17,513,174,192	10,518,747,707	378,452	887,174,501
2000	62**	61**	16,558,409,123	10,190,977,803	4,193,806	808,294,098
1999	76	74	13,169,728,648	9,742,102,332	56,547,053	761,054,109
1998	76	74	13,107,568,019	9,646,672,886	78,152,008	751,835,350
1997	78	76	12,889,096,434	9,666,106,446	90,836,718	759,117,911
1996	78	76	12,508,701,533	9,439,039,918	102,421,509	685,927,048
1995	83	81	12,237,873,040	9,786,426,401	111,828,496	769,229,625
1994	80	79	12,803,124,621	10,024,685,614	125,310,440	612,123,877
1993	82	81	12,579,084,739	10,083,591,274	147,140,942	642,306,615
1992	85	82	13,044,123,346	10,469,716,585	168,996,240	982,078,388
1991	82	80	13,110,373,852	10,339,154,185	198,954,148	699,826,773
1990	70	70	13,682,053,525	9,294,834,458	215,792,631	345,400,108
1989	56	56	12,935,531,202	6,923,416,826	304,045,641	267,162,865
1988	55	52	12,562,618,766	6,105,812,527	441,803,396	685,648,387

***Due to the addition of new beverages on January 1, 2000 from the passage of SB332, the calculation of the redemption and recycling rates for 2000 was based on the sales and return data reported from March - December 2000. This is to account for the two month sales lag. However, the totals for the sales, recycled, refillable and postfilled columns are for January - December 2000.*